

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claims 1 and 8, the independent claims cite "at least one diaphragm which effects a variable numerical aperture in the direction of a line calculated to substantially reduce vignetting produced by a natural decrease in light intensity associated with an imaging lens". The limitation is non-enabling since there is no structural limitation on how this operation is performed in the claim.

Claims 2-7 and 9-16 are rejected because of its dependency upon claims 1 and 8 respectively.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not cleared whether the light source is either linearly or

being linearly arranged is not cleared to the structural limitation of the light source, also is the light source linear and including a linear lens or arranged in a linear arrangement?

As best understood the follow art rejection is given.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Ngai (US 5,530,628).

Regarding claims 1 and 8, Ngai ('628) discloses a linear light source 141, a linearly formed optical element 139, and at least on diaphragm 157.

Regarding claim 8, since the claim, claims the method of illuminating a surface the limitation of claimed are met by Ngai since each limitation is met by the prior art.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2-6 and 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ngai.

Ngai discloses all the limitations of the claims but does not disclose the variable numerical aperture as claimed or the types of finished claimed.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a variable numerical aperture having the compensating according to claims 2 and 9 or the type spectral transmission finish or non spectral finish as cited in claims 3-6, 10-16 since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of design preference and the applicant has not discussed the criticality of the claimed elements. *In re Leshin*, 125 USPQ 416.

Response to Arguments

Applicant's arguments filed November 8, 2007 have been fully considered but they are not persuasive. Regarding the argument of 112 1st paragraph regarding enablement on page 5-8, that the claims as written is enabling such that one of ordinary

skill in the art could make or use the invention, the examiner disagrees with the argument set forth for the reason that it is not clear how one of ordinary skill can produce "a diaphragm which reduces vignetting, but is a diaphragm which reduces vignetting by a particular design configuration". The applicant fails to disclose in the claim how the claim is enabling where one of ordinary skill in the art can produce the device or its structural limitations.

Another consideration is whether the invention produces a "concrete" result. Usually, this question arises when a result cannot be assured. In other words, the process must have a result that can be substantially repeatable or the process must substantially produce the same result again. The opposite of "concrete" is unrepeatable or unpredictable. Resolving this question is dependent on the level of skill in the art. For example, if the claimed invention is for a process which requires a particular skill, to determine whether that process is substantially repeatable will necessarily require a determination of the level of skill of the ordinary artisan in that field.

Regarding the argument on page 8 of the 112 2nd paragraph regarding claim on has not been amended to further limit the all the meets and bounds of the claimed invention the rejection of claim 1, stands.

Regarding the claims rejections of claims 1-16 stands since as best understood claims 1-16 fail to further limit the claimed invention as cited the rejection and the rejection stands.

In claims 1 and 8 the independent claims fails to disclose all the metes and bounds of the claimed invention, the structural limitations of the claims fails to further

Art Unit: 2885

limited such that one of ordinary skill in the art can understand, furthermore it appears that structural limitations of the linear light source in the second portion of the claims is missing.

Regarding 102 rejection of claims 1 and 8 have been given since the claims as written does not further limit all the metes and bounds of the claimed invention so the as the claims are written was given a rejection as best understood.

Regarding claims 103 rejections of claims 2-6 and 9-16 are cited the same references as previous office action for the same reason as the 102 rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Ward whose telephone number is 571-272-2386. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong (James) Lee can be reached on 571-272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAW
April 21, 2008

/John A. Ward/
Primary Examiner, Art Unit 2885